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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/004,471

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Dieter E. Staiger

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12/29/2005

IBM CORPORATION  
INTELLECTUAL PROPERTY LAW DEPT.  
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EXAMINER

OPIE, GEORGE L

ART UNIT

PAPER NUMBER

2194

DATE MAILED: 12/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/004,471	Dieter Staiger	
	<b>Examiner</b>	<b>Art Unit</b>	
	George L. Opie	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ☐ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19-21 is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 9 and 11-18 is/are rejected.
- 7) ☒ Claim(s) 6, 8 and 10 is/are objected to.
- 8) ☐ Claim(s) ☐ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ☐ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on ☐ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some \* c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) ☐.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

**Attachment(s)**

- 14) ☒ Notice of References Cited (PTO-892)
- 15) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 16) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ☐.
- 17) ☐ Interview Summary (PTO-413) Paper No(s) ☐.
- 18) ☐ Notice of Informal Patent Application (PTO-152)
- 19) ☐ Other:

*WILLIAM THOMSON*  
SUPERVISORY PATENT EXAMINER

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## DETAILED ACTION

This Office Action is responsive to the Amendment filed 28 September 2005, in which claims 1, 3,, 5, 6, 19 and 21 were amended.

**1. Request for copy of Applicant's response on floppy disk:**

Please help expedite the prosecution of this application by including, along with your amendment response in paper form, an electronic file copy in WordPerfect, Microsoft Word, or in ASCII text format on a 3½ inch IBM format floppy disk.

Please include all pending claims along with your responsive remarks. Only the paper copy will be entered -- your floppy disk file will be considered a duplicate copy. Signatures are not required on the disk copy. The floppy disk copy is not mandatory; however, it will help expedite the processing of your application. Your cooperation is appreciated.

**2. Allowable Subject Matter**

Claims 19-21 are allowable.

Claims 6, 8 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**3. Claim Rejections - 35 U.S.C. § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5, 7, 9 and 11-18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kim et al. (U.S. 4,625,308) in view of Yoshida et al. (U.S. Patent 5,832,397).

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As to claim 1, Kim teaches a message processing device for communicating with remote units over at least one data network and with at least one dedicated CPU (col.2, line 54-col.3, line 51), comprising:

a first execution unit for receiving a message to be processed and determining the kind of processing treatment to be performed with the received message (e.g., *receives messages...examining the message type; col.76, lines 46-61 and col.84, lines 52-67*), storing control information being used to determine the treatment to be performed with a received message (col.84, lines 51-68 and col.100, lines 29-37).

a second execution unit for performing the determined processing treatment (e.g., *If the message dispatcher task determines that the intended message destination is a lower-level subsystem, the serial subsystem-control subsystem interface task is initiated which decodes the destination field and initiates message transmission to the appropriate serial subsystem. If the task determines that the destination is the control subsystem itself, the message processing task is initiated which evaluates the message data and takes the appropriate action; col.76, lines 46-61/the message processors perform whatever action is required by the message; col.78, lines 8-12*), and

a third execution unit for presenting the result of the determined processing treatment to be forwarded to a destination unit (e.g., *routes required responses to the appropriate destination; col.78, lines 8-12*).

*Kim does not explicitly disclose the additional limitations detailed below.*

Yoshida teaches an "integrated communications apparatus ... for use in a vehicle control system" that includes real-time processing modules "for monitoring and controlling operational status of a plurality of vehicle systems". Yoshida details that a "central control unit 1100 is connected to terminal control units 1300, 1400 and 1500 through a transmission wire 1200", col. 5 et seq., which corresponds to the limitations of the dedicated CPU and remote processing unit.

It would have been obvious to combine Yoshida's teachings with Kim because the integrated control/communication system with a "dedicated subprocessor" would enable increased communications and flexibility for accommodating upgrades in the control system (col. 2 line 56 – col.4 line 35).

As to claim 2, Kim teaches the first execution unit comprises a memory device for storing control information being used to determine the processing treatment to be performed with the received message (col.33, lines 53-55; col.52, lines 51-56; and col.84, lines 65-66).

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As to claim 3, Kim teaches the second execution unit comprises a first set of registers for storing message specific information specifying the data contents and the determined processing treatment of the received message (col.33, lines 31-52; col.34, lines 24-30; and col.83, lines 39-67).

As to claim 4, Kim teaches the second execution unit comprises a first set of registers for storing message specific information specifying the data contents and the determined processing treatment of the received message (col.33, lines 31-52; col.34, lines 24-30; and col.83, lines 39-67).

As to claim 5, Kim teaches the second execution unit comprises at least one process execution unit having access to the first set of registers for performing the determined processing treatment (col.83, lines 39-67).

As to claim 7, Kim teaches the second execution unit comprises a second set of registers being connected to the at least one process execution unit for storing information needed by the process execution unit (col.33, lines 31-52; col.34, lines 24-30; and col.83, lines 39-67).

As to claim 9, Kim teaches the second execution unit is configured to monitor the first set of registers in order to start processing the received message once a process execution unit is available for processing (col.83, lines 39-67).

As to claim 11, Kim teaches the second execution unit is configured to monitor the first set of registers in order to start processing the received message once a process execution unit is available for processing (col.83, lines 39-53).

As to claim 12, Kim teaches the third execution unit is configured to monitor the first set of registers in order to start presenting the result of the message processing once the processing of the received message is complete (col.83, lines 54-67).

As to claim 13, Kim teaches the first execution unit comprises an interface for configuring the memory device with the control information being used to determine the treatment to be performed with the received message (col.83, lines 39-67 and col.84, lines 52-64).

As to claim 14, Kim teaches a switchboard device (col.25, lines 39-56).

As to claim 15, Kim teaches a multiplexer connected to the first and third execution unit and for providing connections to several bus adapters and the CPU (col.25, lines 39-48 and col.26, lines 25-36).

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As to claim 16, Kim teaches an interrupt bus connected to the first execution unit and to several bus adapters and the CPU (col.81, lines 16-25).

As to claim 17, Kim teaches a controller for controlling the multiplexer, whereby the controller is configured to be controlled by either the third execution unit or the CPU (col.34, lines 11-14 and col.39, lines 10-13).

As to claim 18, Kim teaches a controller for controlling the multiplexer, whereby the controller is configured to be controlled by either the third execution unit or the CPU (col.34, lines 11-14 and col.39, lines 10-13).

5. The prior art of record and not relied upon is considered pertinent to the applicant's disclosure. Specifically, the below reference(s) will also have relevancy to one or more elements of the Applicant's claimed invention as follows:

U.S. Patent No. 6,948,186 to Brosey which teaches the message management processing unit;

U.S. Patent No. 6,243,748 to Arai which teaches the remote device control monitoring mechanisms.

## **6. Response to Applicant's Arguments:**

Applicant's arguments have been considered but are moot in view of the new grounds of rejection.

## **7. Contact Information:**

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

Status information for published applications may be obtained from either Private-PAIR or Public-PAIR.

Status information for unpublished applications is available through Private-PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions regarding access to the PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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All responses sent by U.S. Mail should be mailed to:

**Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450**


Hand carried responses should be delivered to the *Customer Service Window* (Randolph Building, 401 Dulany Street, Alexandria, Virginia 22314) and, if submitting an electronic copy on floppy or CD, to expedite its processing, please notify the below identified examiner prior to delivery, so that the Applicant can "handoff" the electronic copy directly to the examiner.

The fax number (571) 273-8300 should be used for all fax transmissions to the Office.

All OFFICIAL faxes will be handled and entered by the docketing personnel. The date of entry will correspond to the actual FAX reception date unless that date is a Saturday, Sunday, or a Federal Holiday within the District of Columbia, in which case the official date of receipt will be the next business day. The application file will be promptly forwarded to the Examiner unless the application file must be sent to another area of the Office, e.g., Finance Division for fee charging, etc.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist at **(571) 272-2100**.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Opie at (571) 272-3766 or via e-mail at *George.Opie@uspto.gov*. Internet e-mail should not be used where sensitive data will be exchanged or where there exists a possibility that sensitive data could be identified unless there is an express waiver of the confidentiality requirements under 35 U.S.C. 122 by the Applicant. Sensitive data includes confidential information related to patent applications.

  
**WILLIAM THOMSON  
SUPERVISORY PATENT EXAMINER**